than 10° centigrade above the respective beginning ambient temperature level.

- (3) The elapsed time necessary for the frequency to stabilize within the applicable tolerance from each beginning ambient temperature level as determined from the tests specified in this paragraph shall be specified in the instruction book for the transmitter furnished to the user.
- (4) When it is impracticable to subject the complete transmitter to this test because of its physical dimensions or power rating, only its frequency determining and stabilizing portions need be tested.
- (d) The frequency stability shall be measured with variation of primary supply voltage as follows:
- (1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.
- (2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.
- (3) The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided. Effects on frequency of transmitter keying (except for broadcast transmitters) and any heating element cycling at the nominal supply voltage and at each extreme also shall be shown.
- (e) When deemed necessary, the Commission may require tests of frequency stability under conditions in addition to those specifically set out in paragraphs (a), (b), (c), and (d) of this section. (For example measurements showing the effect of proximity to large metal objects, or of various types of antennas, may be required for portable equipment.)

[39 FR 5919, Feb. 14, 1974, as amended at 51 FR 31304, Sept. 2, 1986; 56 FR 11682, Mar. 20, 1991. Redesignated at 63 FR 36599, July 7, 1998.]

§ 2.1057 Frequency spectrum to be investigated.

(a) In all of the measurements set forth in §§ 2.1051 and 2.1053, the spectrum shall be investigated from the

lowest radio frequency signal generated in the equipment, without going below 9 kHz, up to at least the frequency shown below:

- (1) If the equipment operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
- (2) If the equipment operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.
- (3) If the equipment operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower.
- (b) Particular attention should be paid to harmonics and subharmonics of the carrier frequency as well as to those frequencies removed from the carrier by multiples of the oscillator frequency. Radiation at the frequencies of multiplier stages should also be checked.
- (c) The amplitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be reported.
- (d) Unless otherwise specified, measurements above 40 GHz shall be performed using a minimum resolution bandwidth of 1 MHz.

[61 FR 14502, Apr. 2, 1996. Redesignated and amended at 63 FR 36599, July 7, 1998]

§ 2.1060 Equipment for use in the amateur radio service.

- (a) The general provisions of §§ 2.925, 2.1031, 2.1033, 2.1041, 2.1043, 2.1051, 2.1053 and 2.1057 shall apply to applications for, and grants of, certification for equipment operated under the requirements of part 97 of this chapter, the Amateur Radio Service.
- (b) When performing the tests specified in §§ 2.1051 and 2.1053 of this part, the center of the transmitted bandwidth shall be within the operating frequency band by an amount equal to 50 percent of the bandwidth utilized for the tests. In addition, said tests shall be made on at least one frequency in each of the bands within which the equipment is capable of tuning.
- (c) Any supplier of an external radio frequency power amplifier kit as defined by \$97.3(a)(17) of this chapter

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shall comply with the following requirements:

- (1) Assembly of one unit of a specific type shall be made in exact accordance with the instructions being supplied with the product being marketed. If all of the necessary components are not normally furnished with the kit, assembly shall be made using the recommended components.
- (2) The measurement data required for certification shall be obtained for this unit and submitted with the certification application. Unless otherwise requested, it is not necessary to submit this unit with the application.
- (3) A copy of the exact instructions which will be provided for assembly of the equipment shall be provided in addition to other material required by §2.1033 of this part.
- (4) The identification label required by §2.925 of this part shall be permanently affixed to the assembled unit and shall be of sufficient size so as to be easily read. The following information shall be shown on the label:

(Name of Grantee of Certification)

FCC ID: (The number assigned to the equipment by the grantor)

This amplifier can be expected to comply with part 97 of the FCC Regulations when assembled and aligned in strict accordance with the instruction manual using components with the kit or an exact equivalent thereof.

(Title and signature of responsible representative of Grantee)

Statement of Compliance

I state that I have constructed this equipment in accordance with the instruction manual and using the parts furnished by the supplier of this kit.

(Signature)

(Date)

 $(Amateur\ call\ sign)\ (Class\ of\ license)$

(Expiration date of license)

(To be signed by the person responsible for proper assembly of kit.)

- (5) If requested, an unassembled unit shall be provided for assembly and test by the Commission. Shipping charges to and from the Commission's Laboratory shall be borne by the applicant.
- (d) Certification of external radio frequency power amplifiers and amplifier kits may be denied when denial serves the public interest, convenience and necessity by preventing the use of

these amplifiers in services other than the Amateur Radio Service. Other uses of these amplifiers, such as in the Citizens Band Radio Service, are prohibited (§95.411 of this chapter). Examples of features which may result in the denial of certification are contained in §97.317 of this chapter.

[63 FR 36601, July 7, 1998]

FILING FOR APPLICATION REFERENCE

§2.1061 Submission of technical information for application reference.

An application for station authorization in some services requires a detailed technical description of the equipment proposed to be used. In order to simplify the preparation and processing of applications by eliminating the need for the submission of equipment specifications with each application, the Commission will accept for application reference purposes detailed technical specifications of equipment designed for use in these services. Manufacturers desiring to avail themselves of this procedure should submit all information required by the application form and the rules for the services in which the equipment is to be used. An application for a station authorization submitted subsequent to such filing may refer to the technical information so filed.

§ 2.1063 Disclaimer re technical information filed for application reference.

Receipt by the Commission of data for application purposes does not imply that the Commission has made or intends to make any finding regarding the acceptability of the equipment for licensing and such equipment will not be included on the list of equipment acceptable for licensing. Each applicant is expected to exercise appropriate care in the selection of equipment to insure that the unit selected will comply with the rules governing the service in which it is proposed to operate.

§ 2.1065 Identification and changes in equipment information filed for application reference.

(a) Each type of equipment, for which information is filed for application reference purposes, shall be identified by